



LAI Network

Coordinating effort between MODIS Land
Validation and BU LAI/fPAR team

Objective: Utilize existing research efforts, which
are monitoring and measuring LAI and related
parameters.

Plan: Exchange field data for TM scale LAI map
produced with MODIS/MISR algorithm.

Currently twenty four sites have agreed to contribute
<http://cybele.bu.edu/modismisr/validation/sitespis.html>



LAI Network Sites, by Biome

Broadleaf Cropland	Broadleaf Forest	Needleleaf Forest	Grassland	Shrubland	Woodland
Everglades	Amazon	BOREAS_NSA *	Uardry	SALSA	Mongu
USDA ARS	Harvard *	Cascades	Konza *	Skukuza	
Bondville *	Park Falls	Krasnoyarsk	Osage	Sevilleta	
Barton Bendish		EM A TREF	North Texas		
Yaqui Valley		Flakaliden	Jornada		
		Mekrijärvi			
		Ruokolahti			

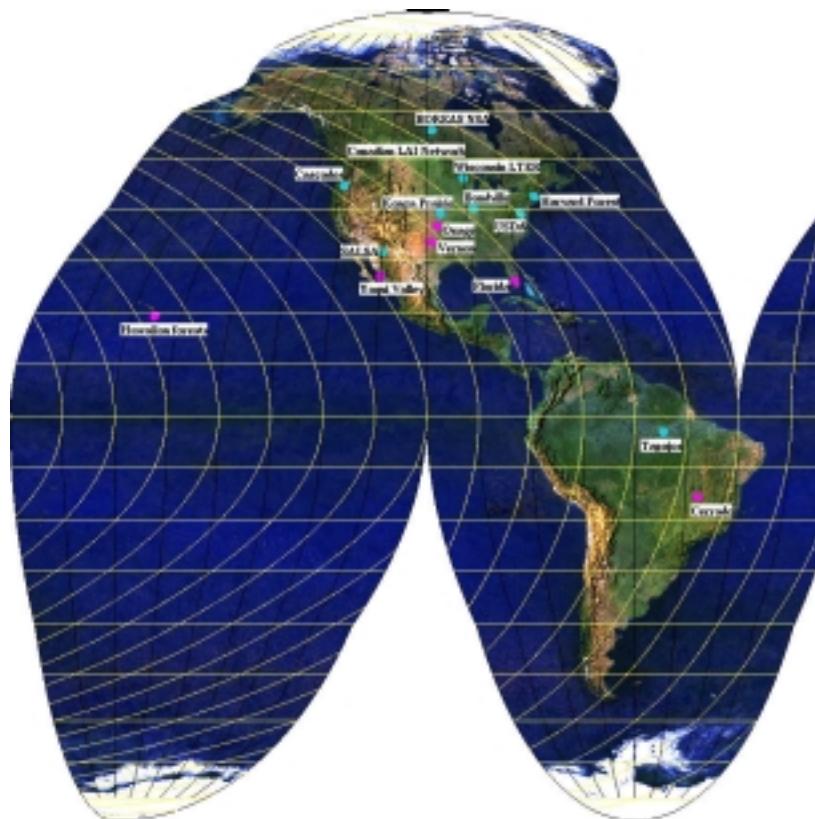
EOS Land Validation Core Sites shown in Blue

Planned MODIS LAI/FPAR team participation in 2000

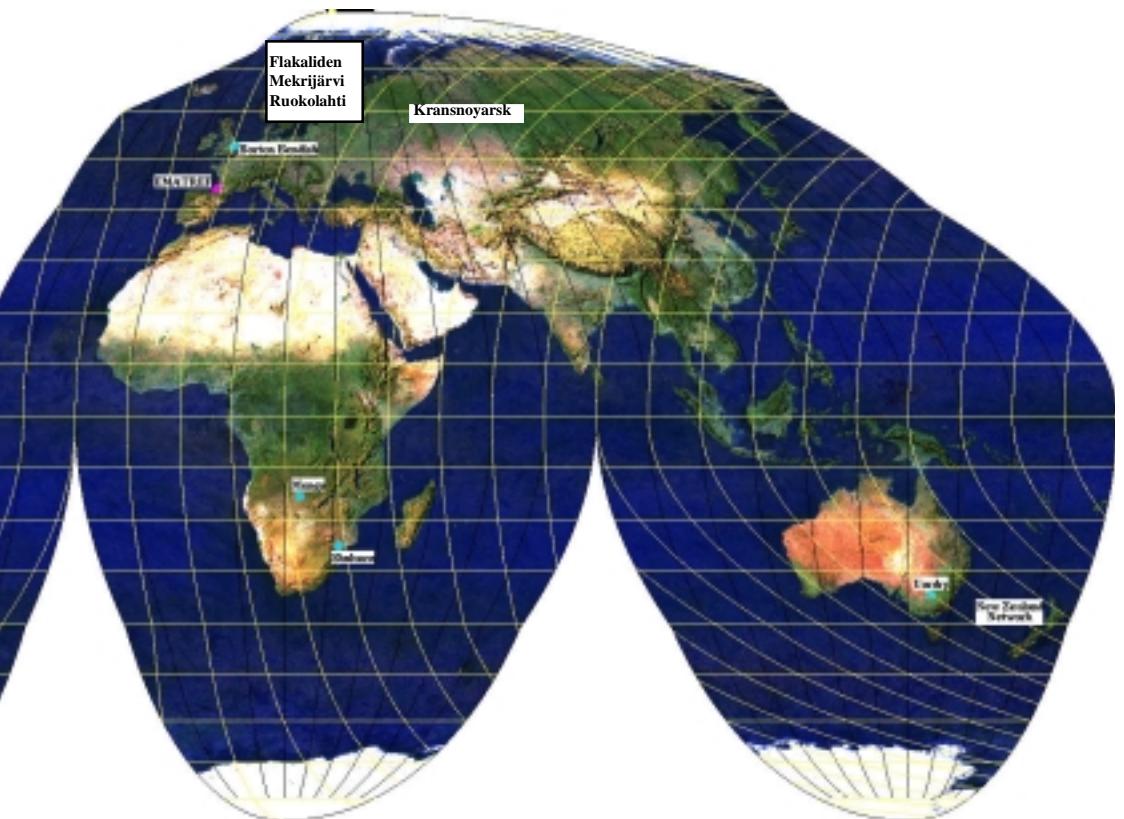
* = BigFoot sites



LAI/FPAR Validation Site Map



LAI/FPAR validation sites - Q-vi satellite projection - Black grid: 10 deg. graticule - Yellow grid: MODLAND L1 tiles



For great Deciduous (MODLAND/LDCP) - May 1999

Core Sites shown in blue

Validation Readiness Review, J.T. Morisette, R. Myneni

17 November 1999



Essential field data

LAI/FPAR measurements under different phenological conditions, sufficient for representing the variability within the local biome.



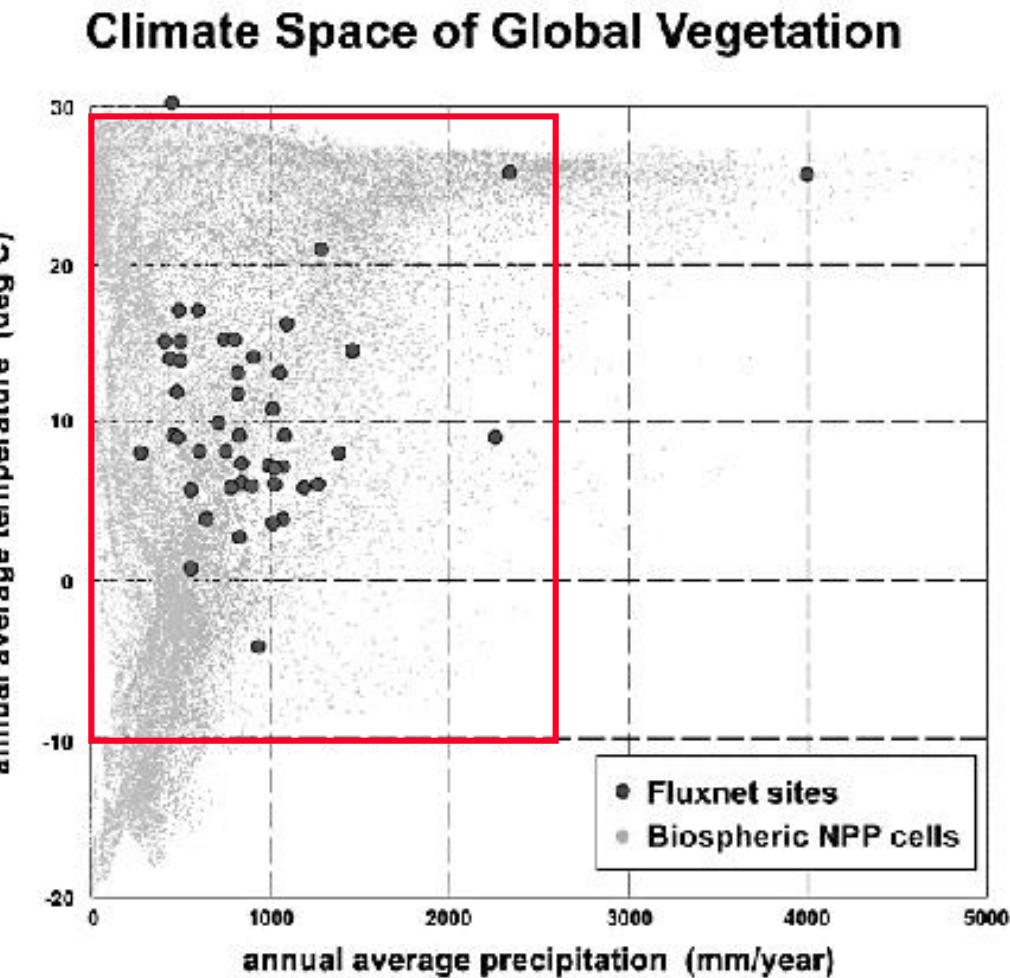
Additional measurements

(in order of priority)

- Canopy multispectral reflectance (nadir or bidirectional)
- Canopy multispectral transmittance
- Leaf spectra (reflectance and transmittance)
- Background nadir spectral reflectance (soil + litter)
- Fraction of vegetation cover
- Vegetation crown allometry (height, width, gap)
- Phenology (green-up, mature, senescent stage)
- Vegetation composition (either by species or structural type)
- Wet or dry status
- Fraction of non-photosynthesizing vegetation
(at min. photosynthetic activity stage)
- Meteorological data
(minimum set: temperature, precipitation for each phonological stage)



Fluxnet sites in Meteorological Space





Core Site Max. LAI in Meteorological Space

